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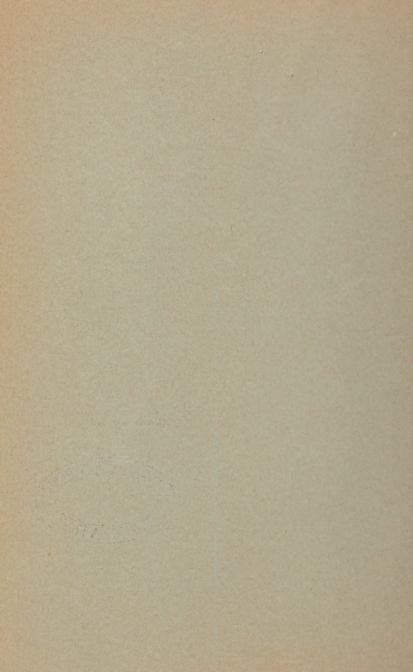
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BY CRESSY L. WILBUR, M.D.
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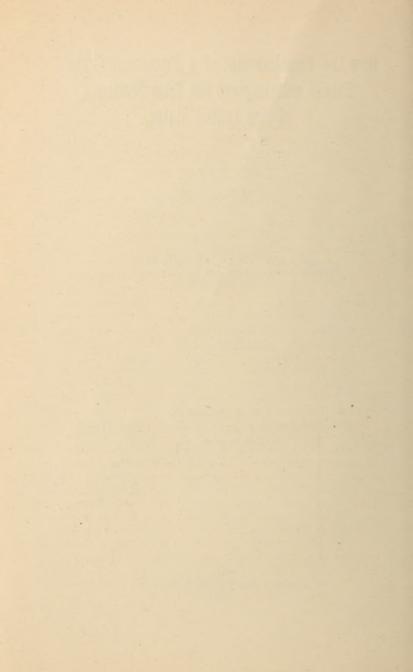
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## HOW THE ESTABLISHMENT OF A PERMANENT CENSUS BUREAU WILL IMPROVE THE VITAL STATISTICS OF THE UNITED STATES.

The establishment of a permanent census bureau has long been advocated by those most familiar with the numerous practical defects of our antiquated census system, both on grounds of greater economy and of improved results. Under a joint resolution of the first session of the present Congress, Hon. Carroll D. Wright, United States Commissioner of Labor, was directed to make a report on the advisability of placing the preparations for the census of 1900 upon a permanent basis, and the results of his labor are now before Congress in the form of a "Bill to provide for

a permanent census service."

The bill contains provision for an enumeration of the population at the quinquennial periods intermediate between the present decennial enumerations. thus making general the means of verifying our knowledge of the population of the country every five years. It is unnecessary to point out how indispensable such frequent censuses are for the computation of accurate vital rates. All rates for intercensal years are based upon estimated populations, and when the estimation is continued for seven, or eight, or nine years after an official census, deductions based thereon may become entirely misleading. Indeed, so evident had the too infrequent character of our National censuses become, that many of the States have already established censuses of their own in order to obtain data at quinquennial periods.

It was not my intention, however, to dwell upon the commendable features in the general census bill

proper, but rather to call attention to the special provisions relating to the very important subject of vital statistics. The text of the bill as originally reported to Congress<sup>1</sup> is as follows:

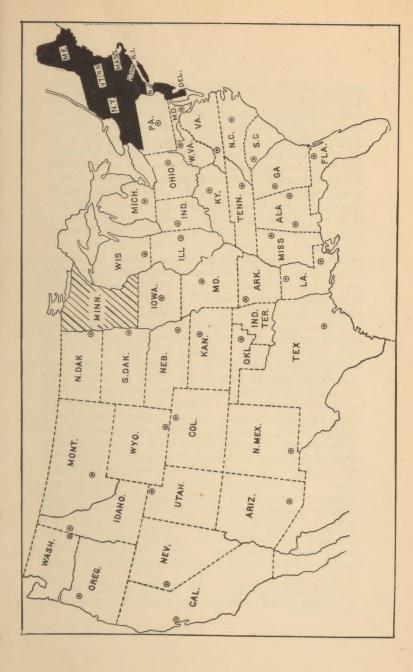
"There shall be a collection of statistics of deaths and of births for the year 1900, and annually thereafter, the data for which shall be obtained from the registration records of those States and municipalities possessing such records. At the time of the decennial enumeration of the population such data may be obtained from representative localities not having such records, at the discretion of the Director of the Census."

Upon this Col. Wright comments as follows:

"The collection of vital statistics every ten years, as now carried on, does not furnish material of value commensurate with the cost. The reliance of the decennial censuses has been upon the data collected from those States and municipalities having a registration system—that is, a compulsory system under which physicians and others must make returns of births and deaths, and clergymen of marriages, the municipal authorities in States having a registration system making returns to the State. These are the only valuable vital statistics in the Federal census. All others, gathered from the people themselves by means of questions on the population schedules, are of no particular value for scientific purposes. When it is understood that the most accurate statistics we have in this country are from 5 to 10 per cent. away from the truth, it seems a useless expenditure of money and a needless irritation of the people to tax the enumerators with questions relating to births, deaths and marriages. Again, the value of vital statistics is increased more than tenfold by having them collected annually. It would be comparatively an inexpensive matter to collate the vital statistics of the United States, so far as registration States and municipalities are concerned, from the reports of such States and municipalities. By the adoption of such a system those States not having a registration system would gradually adopt something of the kind; so the bill under consideration authorizes the Director of the Census to collect vital statistics from representative localities in parts of the country not having a registration system. Ultimately under this provision the whole country would come into line with the States already having their registration provided for."

The United States may be conveniently divided for purposes of vital statistics, as under the last census, into registration and non-registration States. The

<sup>1</sup> Senate Executive Document No. 5, Fifty-fourth Congress, Second Session.



assured registration States, comprising all of the New England States, New York, New Jersey and Delaware, occupy a comparatively small portion of the territory of the Republic (about 4 per cent.), although nearly one-fifth of the entire population of the country is contained in them. All of the other States of the Union are included in the non-registration class, although several of them have had systems of vital statistics in operation for many years. Their results, however, are not sufficiently accurate to determine their true death rates, with possibly a single exception. Minnesota has had a system of mortality statistics based upon certificates of death since the year 1887, and the results obtained under it are claimed to be reliable. In the chart showing the registration area in black and the non-registration area unshaded,2 Minnesota is partially shaded and should, perhaps, be

included among the full registration States.

1. The registration States will be benefited by the annual compilation of their data, which is an important feature of the proposed law, and which will undoubtedly bring out many valuable comparisons. Something similar has already been undertaken by the registrars of the six New England States in the quinquennial "Summary of the Vital Statistics of the New England States." In the case of Michigan, which I trust may become a registration State by act of the present legislature, we shall be very glad to devolve the higher statistical treatment of our vital statistics upon the bureau of the general government, which alone can handle them to the best advantage; sufficient for the State registration bureau will remain in the thorough administration of the law for the collection of data, the primary compilations, and the issuing of timely information in the shape of bulletins or otherwise for the benefit of the public health service. What is true of the State systems of regis-

<sup>&</sup>lt;sup>2</sup> The division is made on the basis of mortality statistics alone. New York has imperfect returns of births and marriages. Several of the so-called non-registration States have excellent systems of marriage statistics.

tration is even more true of the municipal systems, especially those situated in non-registration States. There are few if any satisfactory compilations of their vital data, and a central bureau competent to act as a general clearing-house for municipal systems of registration is greatly needed. It is not enough to accept and publish the mere statements of city authorities. The accuracy of registration must be examined and standardized, population must be properly estimated, and such a general supervision be exercised over the conduct of registration that the results, when published by the government bureau, shall be known to be reliable.

2. Even greater advantages will accrue to the socalled non-registration States, which include about 96 per cent. of the area and four-fifths of the total population of the country. It is not feasible to institute a general system of registration in these States, but the bill provides that "data may be obtained from representative localities not having such records, at the discretion of the Director of the Census." The bill at present limits such collection of vital data from the non-registration States to "the time of the decennial census;" this, however, is an oversight which will be amended before passage. The reasons for a continuous registration of vital data in non-registration States are as strong as those for an annual collection of data from the registration States, or even stronger, since the data from the latter are accessible at present, while the proposed representative data will depend for a time entirely upon the census bureau.

In the chart certain circles with central dots represent the locations of agricultural experiment stations in the United States. It is planned, under the power intrusted to the Director of the Census, to establish vital statistics observation stations, or rather districts, in much the same way. Selected counties from each State, carefully chosen with reference to geographical situation and representative character of population, will give reliable information in regard to

the vital movement of each State. Reliable representative birth rates and death rates will at last be obtainable. For years the sanitary workers in the great central West have been handicapped by the absence of reliable mortality data. When the way is shown, and the people shall actually see the benefits resulting from accurate registration among them, undoubtedly an increase in the number of State systems will result. Of course it may be necessary to have several registration districts in the same State, if a large one, or having great diversity of population; perhaps three or four districts will be sufficient on the average.

It will be very necessary to select districts having an average distribution of urban and rural population. One of the chief objections to the vital statistics of the cities of the non-registration States at present is their failure to represent the average degree of density of population. Statistics obtained from the country as well as from the city would be less objectionable in

this respect.

Taken altogether, the provisions of the proposed bill relating to vital statistics seem well adapted to introduce a system of partial but thoroughly representative registration, whose results will be vastly superior to anything we have previously derived from the census investigations. All of the details of collection of data and the specific limits of the inquiry are, of course, not yet worked out. Enough of promise appears, however, in the draft of the organic census law to enlist the interest and assistance of physicians, sanitarians and sociologists in behalf of the measure, and I sincerely trust that active efforts will be made to assist its passage by all who desire better vital statistics for the United States.

